CUSTOMER NO.: 38107

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of S. KULKARNI, et al.	)	Examiner: C. SUNG
	)	Art Unit: 2884
Serial No.: 09/905,418	)	Confirmation: 4726
Filed: July 13, 2001	)	
For: **NUCLEAR CAMERA WITH OPEN AND FLEXIBLE SOFTWARE ARCHITECTURE**	)	
Date of Last Office Action: November 17, 2006	)	
Attorney Docket No.: PHUS019011US / PKRZ 2 00876	)	Cleveland, OH 44114 January 18, 2007

APPEAL BRIEF

Mail Stop: AF
Commissioner For Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

A Notice of Appeal was filed November 21, 2006, appealing from the Final Rejection mailed November 17, 2006 rejecting claims 1-8, 10-11, 14-15, and 20-27.

Payment of the 37 CFR 1.20(b)(2) fee in the amount of $ 500.00 is enclosed.

CERTIFICATE OF ELECTRONIC TRANSMISSION

I certify that this Appeal Brief and accompanying documents in connection with U.S. Serial No. 09/905,418 are being filed on the date indicated below by electronic transmission with the United States Patent and Trademark Office via the electronic filing system (EFS-Web).

January 18, 2007
Date

Patricia A. Heim
Patricia A. Heim

DEPOSIT ACCOUNT

The Patent Office is authorized to charge any fees associated with this filing to our deposit account no. **14-1270**

Douglas B. McKnight, Reg. No. 50,447

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(i) REAL PARTY IN INTEREST

The real party in interest is the Assignee of Record, KONINKLIJKE PHILIPS ELECTRONICS, N.V.

(ii) RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

(iii) STATUS OF CLAIMS

Claims 1-8, 10, 11, 14, 15, and 20-27 are pending.

Claims 9, 12, 13, and 16-19 were cancelled.

No claims currently stand allowed, withdrawn, or objected to.

(iv) STATUS OF AMENDMENTS

An Amendment E is filed with this Appeal Brief. Although its status is currently unknown, because claim 14 is amended only to cure a potential antecedent basis issue and claim 20 is amended only to cure two minor typographical errors, it is believed that this amendment will be entered.

(v) SUMMARY OF CLAIMED SUBJECT MATTER

With regard to claim 1, the nuclear camera system includes a detector **(10, 12)** which acquires radionuclide event data (page 4, lines 14-20). An image processor **(14, 52, 70)** processes the event data to produce image data (ADACImage.xml) (page 4, line 21 and lines 24-28; page 6, line 27; page 8, lines 1-3). An image data storage medium **(28; 56)** stores the image data (ADACImage.xml) (page 4, lines 24-25; page 8, lines 4-5, *et. seq.*). An image data processor **(52)** formats the image data for storage on the storage medium **(56; 100)** in an extensible and open format (.xml) (page 8, lines 1-3 and lines 6-32).

With regard to claim 10, the control data storage medium **(56)** is coupled to an acquisition controller **(52)** which stores control data in an extensible and open data format (.xml) (page 6, line 23 – page 7, line 3).

With regard to claim 14, a radiation-based diagnostic imaging system includes a detector **(10, 12)** which acquires radiation data (page 4, lines 17-18). An image processor **(14, 28, 54, 70)** processes the radiation data to produce image data (ADACImage.xml) (page 4, line 21 and lines 24-28; page 8, lines 1-3). A control data storage medium **(16, 56)** is coupled to an acquisition controller **(52)** and stores control data (protocol.xml) in an .xml format (page 4, lines 29-35; page 6, line 23 – page 7, line 3). The acquisition controller **(52)** executes a script **(52a)** utilizing an .xml file to control the acquisition of radiation data (page 6, line 23 – page 7, line 4).

With regard to claim 15, the script **(52a)** is a protocol file of the form (protocol.xml) (page 10, lines 17-34).

With regard to claim 20, a detector **(10, 12)** acquires diagnostic image data (page 4, lines 17-18). An image processor **(14, 28, 54, 70)** processes the diagnostic data to produce image data (ADACImage.xml) (page 4, line 21 and lines 24-28; page 8, lines 1-3). An acquisition controller **(14, 52)** controls the detector to acquire diagnostic data (page 6, line 26 – page 7, line 4). A control data storage medium **(56)** is coupled to the controller **(54)** and stores control data (protocol.xml) in .xml format (page 4, lines 29-35; page 6, line 23 – page 7, line 3). An image data storage medium **(56, 100)** is coupled to the image processor **(52)** and stores image data (ADACImage.xml) in .xml format (page 4, lines 24-25; page 8, line 4, *et. seq.*; page 10, lines 17-34). A server **(14, 52, 54)** coupled to the control data storage

medium **(56)** and the image data storage medium **(56, 100)** accesses at least one of .xml control data files (protocol.xml) and .xml images data files (ADACImage.xml) and executes scripts **(52a)** which utilize .xml control data files (page 6, line 24 – page 7, line 5).

Regarding claim 21, a nuclear camera system includes a detector **(10, 12)** which acquires radionuclide event data (page 4, lines 17-18). An image processor **(14, 28, 54, 70)** processes the event data to produce image data (page 4, line 21 and lines 24-28; page 8, lines 1-3). An acquisition controller **(52)** acts to control the detector **(10, 12)** to acquire event data in accordance with a study protocol (page 6, line 23 – page 7, line 4). The acquisition controller **(52)** executes a script **(52a)** utilizing an .xml file to control the acquisition of event data (page 10, lines 17-34). A control data storage medium **(56)** coupled to the acquisition controller **(52)** stores control data (protocol.xml) in an extensible and open format (.xml) (page 10, lines 17-34).

With regard to claim 22, the application discloses a nuclear camera system including a detector **(10, 12)** which acquires radionuclide event data (page 4, lines 17-18). An image processor **(14, 28, 54, 70)** processes the event data to produce image data (ADACImage.xml) (page 4, lines 21-28; page 8, lines 1-3). An acquisition controller **(52)** acts to control the detector **(10, 12)** to acquire event data in accordance with a study protocol (page 6, line 23 – page 7, line 5). A control data storage medium **(56)** coupled to the acquisition controller **(52)** stores control data (protocol.xml) in .xml format (page 4, lines 29-35; page 6, line 23 – page 7, line 3). The control data includes .xml files (protocol.xml) provided by the camera system manufacturer and .xml files (protocol.xml) modified or created by a camera user (page 1, lines 6-19; page 1, line 33 – page 2, line 14; page 2, line 54 – page 3, line 22). A user interface **(16, 60)** and a server **(14, 52, 54)** is responsive to the user interface and coupled to the control data storage medium **(56)** and the image data storage medium **(56, 100)** which accesses .xml control data files (protocol.xml) or .xml image data files (ADACImage.xml) in response to user commands (page 4, line 31 – page 5, line 2; page 7, lines 6-23). The server **(52)** executes scripts **(52a)** which utilize .xml data control files (protocol.xml) (page 6, line 33 – page 7, line 7).

With regard to claim 23, the present application discloses a method of acquiring nuclear medicine images. Emission data from an image subject is acquired (page 4, lines 16-18; page 5, lines 7-30). The emission data is processed to produce image data (page 4, lines 20-28).

The image data is stored (page 4, lines 24-25; page 6, lines 28-29). New user data formats or requirements are incorporated into the processing data without requiring a manufacturer's proprietary image format conversion routine (page 2, line 34 – page 3, line 13; page 9, line 21 – page 10, line 16). The image data (ADACImage.xml) is stored in a format (.xml) that allows for such incorporation of new user data format requirements (page 2, line 34 – page 3, line 13; page 9, line 21 – page 10, line 16).

With regard to claim 26, the application discloses a medical image system which includes a means **(10, 12, 82)** for acquiring image data from an imaged subject (page 4, lines 16-18; page 5, lines 7-30). A means **(14, 28, 82)** processes the emission data to produce image data (ADACImage.xml) (page 4, lines 20-28). A means **(56, 100)** stores the image data (page 4, lines 24-25; page 6, lines 28-29). A means **(60)** incorporates new user data format requirements into the processing data without requiring a manufacturer's proprietary image format conversion routine (page 2, line 34 – page 3, line 13; page 9, line 21 – page 10, line 16). The image data (ADACImage.xml) is stored in a format (.xml) that allows for such an incorporation of the new user data format requirements page 2, line 34 – page 3, line 13; page 9, line 21 – page 10, line 16).

(vi) GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether claims 1-8, 10, 11, 14, 15, and 20-27 were properly held to be unpatentable in the sense of 35 U.S.C. § 103(a) over Ashburn (US 5,742,060) in view of Wang (*Potential Use of Extensible Mark-Up Language for Radiology Reporting: A Tutorial*, RadioGraphics, Jan-Feb. 2000, Vol. 20, pages 287-293).

(vii) ARGUMENT

THE REFERENCES

The **Ashburn** patent is directed to a typical prior art scanner as discussed briefly in the present application at page 1, lines 9-30. This prior art scanner suffers the problems noted in the present application at page 1, line 31 – page 2, line 25. Ashburn does not, itself, recognize these deficiencies, much less provide the reader with a motivation to look for solutions to these problems.

Wang is directed to a report generator. More specifically, Wang contemplates a medical institution standardized report format, or more precisely, a plurality of report formats for each of a plurality of different medical examinations performed at the medical institution. When the medical professional writes a patient report after an examination, such as the aorta ultrasound example in Wang, a report blank as shown in Figure 3 is displayed. The medical professional fills in each of the appropriate blanks in the blank form. The form blank is an .xml document in which each of the blanks is predefined. Each element of entered data is then stored in conjunction with the corresponding identifier. In this manner, when the report is transmitted, such as via the internet to a medical professional in a different medical institution. When the medical professional at the second institution opens the report, the report will appear in the form and format of the aorta ultrasound reports used at the second medical institution. In this manner, the medical professionals at both institutions consistently use their own report formats or blanks, whether generating the report or receiving and reviewing one. If the medical institutions are in different countries, each of the report blanks can be in the natural language of that country. Of course, the comments section will still be in its original language.

The Wang reporting system is also advantageous for computer based medical research. Because each of the blanks in each of a family of report blanks is identified, a researcher can search all of the data, regardless of the report form on which it is entered, which relates to the medical condition of interest. **In addition to looking at what Wang does disclose, one must consider what Wang does not disclose.** First, the Wang data entry forms do not have the capacity to include digital images (page 292, column 2, first paragraph). Wang indicates that DICOM is a proposed standard for medical images but provides no enabling disclosure regarding

how to incorporate the DICOM and .xml formats into a common report. Moreover, it must be remembered that Wang only suggests using .xml for reports. There is no suggestion of using .xml for other purposes, such as a format for information for controlling the operation of medical or other devices. It should also be noted that although DICOM is a proposed standardized video and image format, it is not an extensible and open data format. Manufacturers still use their own proprietary image and control formats. A converter is used to convert the proprietary image format into the DICOM format so that it can be opened and viewed on equipment from other sources.

Not only does Wang not know how to use .xml for images, Wang in the middle of the paragraph indicates that "Efforts are underway to use XML" indicate that neither Wang nor others who have recognized this need have been able to fulfill it. The fact that the present application fulfills a long-felt but unmet need is evidence of unobviousness.

Wang proposes an open and extensible data format for a flexible report form but makes no suggestion and provides no motivation or enabling disclosure to modify the Ashburn system to format the image data for storage in an extensible and open data format.

THE CLAIMS DISTINGUISH PATENTABLY OVER THE REFERENCES

Claim 1 calls for an image data processor (note processor **52**) which formats the image data for storage on the storage medium in an extensible and open format. By distinction, Ashburn is illustrative of the acknowledged prior art in which the imaging system uses its own proprietary image format. Ashburn provides no motivation to look for a different or universal format. Indeed, the various manufacturers have spent extensive amounts of research time and money developing what they believe to be the best and most advantageous formats. Using an extensible and open data format would enable a user to change the formats and make other modifications. This can raise serious issues if a user makes modifications that cause the equipment to infringe another company's patents. It also raises serious issues if medical data is mis-collected, mis-stored, or otherwise lost. The manufacturer knows that its format works and works well. If the format is changed, medical information

may be lost creating potential liability lawsuits against the manufacturer by patients who are adversely affected by the loss of medical information. Loss of medical information includes the loss of information within an image, such as resolution, contrast, or the like, which could make a medical image more difficult to read and more difficult for the radiologist to make the correct diagnosis. In short, there is no motivation in Ashburn to change the manufacturer's proprietary image format to an extensible and open data format.

Claim 1 also calls for an image data processor (note processor **52**) which formats the image data for storage on the storage medium in an extensible and open format. The report system of Wang evidences no ability to store image data. Rather, the first paragraph of the second column of page 292 of Wang suggests that neither Wang nor others have succeeded in storing image data in .xml or other extensible and open data formats. Further, Wang suggests that one should look at using the DICOM standard for images. DICOM is not an extensible and open data format.

Accordingly, it is submitted that **claim 1 and claims 2-8, 10, and 11 dependent therefrom** distinguish patentably and unobviously over the references of record.

Claim 14 calls for an acquisition controller which executes a script **52a** utilizing an .xml file to control the acquisition of radiation data. Ashburn makes no suggestion of using an .xml file or any non-proprietary file to control its imaging system. Wang, which relates to a report generator system, makes no suggestion that a medical diagnostic scanner should be controlled in its acquisition of data utilizing an .xml file. Wang relates solely to reports and report data and never even addresses the control of data acquisition, much less makes any suggestion that the control of data acquisition should be controlled using an .xml file.

Accordingly, it is submitted that the Examiner's original allowance of claim 14 was correct and that her withdrawal of that allowance in favor of a rejection over Ashburn in view of Wang is incorrect. It is submitted that **claim 14 and claim 15 dependent therefrom** distinguish patentably and unobviously over Ashburn and Wang.

Claim 20 calls for a server which accesses at least one of .xml control data files and image data files and executes scripts which utilize .xml control data files. Again, Ashburn does not utilize and makes no suggestion that would motivate one to utilize .xml control data files. The report generator of Wang also makes no suggestion of executing scripts which utilize .xml control data files. Wang neither recognizes nor suggests or reason why one would want to utilize .xml control data files or provide any motivation for modifying Ashburn such that it would exercise scripts which utilize .xml control data files. With regard to .xml image data files, Wang addresses the desirability of incorporating images into its report format, but evidences no knowledge regarding how to do so. Indeed, the first paragraph of column 2 of page 292 suggests that others have also been unsuccessful in meeting this need.

Accordingly, it is submitted that the Examiner's original decision to allow claim 20 was correct and that her later decision to withdraw the allowance in light of Ashburn and Wang was incorrect. **Claim 20** distinguishes patentably and unobviously over Ashburn and Wang.

Claim 21 calls for an acquisition controller to execute a script utilizing an .xml file to control the acquisition of event data. Ashburn does not describe the use of .xml or other extensible and open data formats to control the acquisition of event data and provides no motivation for the reader to acquire data using extensible and open data formats for acquisition control. Wang fails to provide either motivation or enablement for an acquisition controller which executes a script utilizing an .xml file to control the acquisition of event data. Wang does not address control of the acquisition of diagnostic data, hence, makes no suggestions and provides no motivation regarding the data acquisition process. Moreover, Wang neither discloses nor provides any motivation for one to design an acquisition controller which executes a script utilizing an .xml file to control the acquisition of event data.

Because neither Ashburn nor Wang disclose or provide any motivation to utilize an acquisition controller which executes a script utilizing an .xml file to control the acquisition of event data, it is submitted that the Examiner should withdraw the rejection and reinstate the previous allowance of claim 21. It is

submitted that **claim 21** distinguishes patentably and unobviously over Ashburn and Wang.

Claim 22 calls for control data comprising .xml files provided by a camera system manufacturer and for .xml files modified or created by a camera user. Ashburn provides no disclosure of control data which is modifiable by a user, much less provides any motivation nor recognizes any need for one to add such a feature to the Ashburn imaging system. Wang also fails to provide any motivation or enabling disclosure which would suggest the use of control data comprising .xml files or that a user of a medical diagnostic imaging apparatus can or should have the ability to modify such control data, much less provide an enabling disclosure as to how one might go about doing so.

Accordingly, it is submitted that the Examiner's earlier allowance of claim 22 was correct and the Examiner's current rejection of claim 22 over Ashburn and Wang is in error. It is submitted that **claim 22** distinguishes patentably and unobviously over Ashburn and Wang.

Claim 23 calls for a method of acquiring nuclear images in which new user data format requirements are incorporated into the processing data without requiring a manufacturer's proprietary image format conversion routine. In Ashburn, there is no suggestion or motivation to enable a user to incorporate new data format requirements into the processing data without an image format conversion routine from the manufacturer's proprietary format. Contrary to the Examiner's assertion, which is not supported in the Ashburn reference, Ashburn makes no suggestion that its image data is in a format that is compatible with other existing imaging devices of others. Pursuant to MPEP 2144.03, the applicants request that the Examiner supply evidence to support his assertion. Wang does not address this shortcoming of Ashburn. Wang is directed to a report generator which looks to standardize the information loaded into reports by diagnosticians. While Wang addresses the use of .xml for report generation, Wang makes no suggestion of incorporating new user data format requirements into the processing data without a format conversion routine. The section from pages 289-290 referenced by the Examiner extols the virtues of using .xml to generate data entry forms or report templates to record different findings for a variety of examinations and diseases. The first paragraph on page 290

recognizes three types of data items – binary, numeric, and textual. There is no suggestion in this or other parts of Wang which would motivate or enable one to take image data in a manufacturer's proprietary image format and attach or use it as part of a report without first going through an image format conversion routine. Wang does not suggest or provide an enabling disclosure as to how to attach an image. The discussion in the second column of page 292, to the contrary, suggests that such a goal is currently unattainable by Wang and others. Wang hints that the DICOM standard may be a key to solving this unsolved problem, but an image complying with the DICOM format is achieved through the use of an image format conversion routine which converts images from the manufacturer's propriety format to the DICOM standard. Moreover, the DICOM standard is a fixed standard (not extensible and open) and is not amenable to the incorporation of new user data format requirements.

Accordingly, it is submitted that Wang fails to cure the numerous shortcomings of Ashburn and that **claim 23 and claims 24-25 dependent therefrom** distinguish patentably and unobviously over Ashburn and Wang.

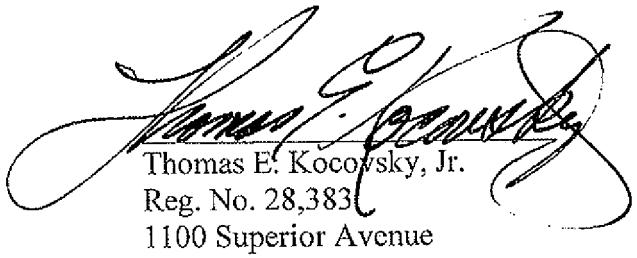
Claim 26 calls for a means for incorporating new user data format requirements into the processing data without requiring a manufacturer's proprietary image format conversion routine analogous to claim 23. For the reasons set forth in claim 23, it is submitted that **claim 26 and claim 27 distinguish patentably** and unobviously over the references of record.

CONCLUSION

For the reasons set forth above, it is submitted that all claims distinguish patentably and unobviously over Ashburn and Wang. A reversal of the Examiner's 35 U.S.C. § 103 rejection over Ashburn in view of Wang is requested. An early reversal of the rejections of all claims is requested.

Respectfully submitted,

FAY SHARPE LLP



Thomas E. Kocovsky, Jr.
Reg. No. 28,383
1100 Superior Avenue
Seventh Floor
Cleveland, OH 44114-2579
(216) 861-5582

(viii) CLAIMS APPENDIX (I)

(This appendix assumes that the accompanying Amendment E will be entered. Following CLAIMS APPENDIX (II) presents the claims in their current state if Amendent E is denied entry).

1. A nuclear camera system comprising:

a detector which acquires radionuclide event data;

an image processor which processes the event data to produce image data;

an image data storage medium which stores the image data; and

an image data processor which formats the image data for storage on the storage medium in an extensible and open data format.

2. The nuclear camera system of Claim 1, wherein the image data processor formats the image data in xml format.

3. The nuclear camera system of Claim 1 or 2, wherein the data format is self-descriptive.

4. The nuclear camera system of Claim 3, wherein the data format further comprises format definitions which are available with the image data.

5. The nuclear camera system of Claim 4, wherein a format definition describes the relationship between two or more pieces of image data.

6. The nuclear camera system of Claim 5, wherein the image data is stored in a data file; and wherein the image data file contains a pointer to a file storing a definition of the image data format.

7. The nuclear camera system of Claim 6, wherein the pointer is to an address of a file stored on the nuclear camera system.

8. The nuclear camera system of Claim 6, wherein the pointer is to a URL address where the image data definition file may be found.

9. (Cancelled)

10. The nuclear camera system of claim 1, further comprising

a control data storage medium, coupled to an acquisition controller, which stores control data in an extensible and open data format.

11. The nuclear camera system of Claim 10, wherein the control data is stored in xml format.

12. (Cancelled)

13. (Cancelled)

14. A radiation based diagnostic imaging system including:

a detector which acquires radiation data;

an image processor which processes the radiation data to produce image data;

a control data storage medium, coupled to an acquisition controller, which stores control data in an xml format; and

the acquisition controller executes a script utilizing an xml file to control the acquisition of the radiation data.

15. The system of Claim 14, wherein the xml file utilized by the script is a protocol file of the form <protocol.xml>.

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Cancelled)

20. A diagnostic imaging system including:

a detector which acquires diagnostic data;

an image processor which processes the diagnostic data to produce image data;

an acquisition controller which controls the detector to acquire diagnostic data;

a control data storage medium, coupled to the acquisition controller, which stores control data in xml format;

an image data storage medium coupled to the image processor, which stores image data in xml format; and

a server coupled to the control data storage medium and the image data storage medium, which server accesses at least one of xml control data files and xml images data files and executes scripts which utilize xml control data files.

21. A nuclear camera system comprising:

a detector which acquires radionuclide event data;

an image processor which processes the event data to produce image data;

an acquisition controller which acts to control the detector to acquire event data in accordance with a study protocol, wherein the acquisition controller executes a script utilizing an xml file to control the acquisition of event data; and

a control data storage medium, coupled to the acquisition controller, which stores control data in an extensible and open data format.

22. A nuclear camera system comprising:

a detector which acquires radionuclide event data;

an image processor which processes the event data to produce image data;

an acquisition controller which acts to control the detector to acquire event data in accordance with a study protocol;

a control data storage medium, coupled to the acquisition controller, which stores control data in xml format, the control data comprising xml files provided by the camera system manufacturer and xml files modified or created by a camera user; and

a user interface and a server, responsive to the user interface and coupled to the control data storage medium and the image data storage medium, which accesses xml control data files or xml image data files in response to user commands wherein the server executes scripts which utilize xml control data files.

23. A method of acquiring nuclear medicine images comprising:

acquiring emission data from an imaged subject;

processing the emission data to produce image data;

storing the image data; and

incorporating new user data format requirements into the processing data without requiring a manufacturer's proprietary image format conversion routine;

wherein the image data is stored in a format that allows for such incorporation of new user data format requirements.

24. The method of claim 23 wherein the image data is stored in xml format.

25. The method of claim 23 further comprising controlling acquisition of the emission data with scripts written in an open and extensible format.

26. An medical imaging system comprising:

means for acquiring emission data from an imaged subject;

means for processing the emission data to produce image data;

means for storing the image data; and

means for incorporating new user data format requirements into the processing data without requiring a manufacturer's proprietary image format conversion routine;

wherein the image data is stored in a format that allows for such incorporation of the new user data format requirements.

27. The medical imaging system of claim 26 wherein the image data is stored in xml format.

(viii) CLAIMS APPENDIX (II)

(This appendix assumes that the accompanying Amendment E is denied entry).

1. A nuclear camera system comprising:

a detector which acquires radionuclide event data;

an image processor which processes the event data to produce image data;

an image data storage medium which stores the image data; and

an image data processor which formats the image data for storage on the storage medium in an extensible and open data format.

2. The nuclear camera system of Claim 1, wherein the image data processor formats the image data in xml format.

3. The nuclear camera system of Claim 1 or 2, wherein the data format is self-descriptive.

4. The nuclear camera system of Claim 3, wherein the data format further comprises format definitions which are available with the image data.

5. The nuclear camera system of Claim 4, wherein a format definition describes the relationship between two or more pieces of image data.

6. The nuclear camera system of Claim 5, wherein the image data is stored in a data file; and wherein the image data file contains a pointer to a file storing a definition of the image data format.

7. The nuclear camera system of Claim 6, wherein the pointer is to an address of a file stored on the nuclear camera system.

8. The nuclear camera system of Claim 6, wherein the pointer is to a URL address where the image data definition file may be found.

9. (Cancelled)

10. The nuclear camera system of claim 1, further comprising

a control data storage medium, coupled to an acquisition controller, which stores control data in an extensible and open data format.

11. The nuclear camera system of Claim 10, wherein the control data is stored in xml format.

12. (Cancelled)

13. (Cancelled)

14. A radiation based diagnostic imaging system including:

a detector which acquires radiation data;

an image processor which processes the radiation data to produce image data;

a control data storage medium, coupled to the acquisition controller, which stores the control data in an xml format; and

an acquisition controller which executes a script utilizing an xml file to control the acquisition of the radiation data.

15. The system of Claim 14, wherein the xml file utilized by the script is a protocol file of the form <protocol.xml>.

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Cancelled)

20. A diagnostic imaging system including:

a detector which acquires diagnostic data;

an image processor which processes the diagnostic data to produce image data;

an acquisition controller which controls the detector to acquire diagnostic data;

a control data storage medium, couple to the acquisition controller, which stores control data in xml format;

an image data storage medium, couple to the image processor, which stores image data in xml format; and

a server coupled to the control data storage medium and the image data storage medium, which server accesses at least one of xml control data files and xml images data files and executes scripts which utilize xml control data files.

21. A nuclear camera system comprising:

a detector which acquires radionuclide event data;

an image processor which processes the event data to produce image data;

an acquisition controller which acts to control the detector to acquire event data in accordance with a study protocol, wherein the acquisition controller executes a script utilizing an xml file to control the acquisition of event data; and

a control data storage medium, coupled to the acquisition controller, which stores control data in an extensible and open data format.

22. A nuclear camera system comprising:

a detector which acquires radionuclide event data;

an image processor which processes the event data to produce image data;

an acquisition controller which acts to control the detector to acquire event data in accordance with a study protocol;

a control data storage medium, coupled to the acquisition controller, which stores control data in xml format, the control data comprising xml files provided by the camera system manufacturer and xml files modified or created by a camera user; and

a user interface and a server, responsive to the user interface and coupled to the control data storage medium and the image data storage medium, which accesses xml control data files or xml image data files in response to user commands wherein the server executes scripts which utilize xml control data files.

23. A method of acquiring nuclear medicine images comprising:

acquiring emission data from an imaged subject;

processing the emission data to produce image data;

storing the image data; and

incorporating new user data format requirements into the processing data without requiring a manufacturer's proprietary image format conversion routine;

wherein the image data is stored in a format that allows for such incorporation of new user data format requirements.

24. The method of claim 23 wherein the image data is stored in xml format.

25. The method of claim 23 further comprising controlling acquisition of the emission data with scripts written in an open and extensible format.

26. An medical imaging system comprising:

means for acquiring emission data from an imaged subject;

means for processing the emission data to produce image data;

means for storing the image data; and

means for incorporating new user data format requirements into the processing data without requiring a manufacturer's proprietary image format conversion routine;

wherein the image data is stored in a format that allows for such incorporation of the new user data format requirements.

27. The medical imaging system of claim 26 wherein the image data is stored in xml format.

(ix) EVIDENCE APPENDIX

None

(x) RELATED PROCEEDINGS APPENDIX

None